Office de la Propriété Intellectuelle du Canada
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Canadian Intellectual Property Office
An agency of Industry Canada

CA 2121491 C 2004/07/27

(11)(21) 2 121 491

(12) BREVET CANADIEN
CANADIAN PATENT

(13) C

(86) Date de dépôt PCT/PCT Filing Date: 1993/08/19
(87) Date publication PCT/PCT Publication Date: 1994/03/03
(45) Date de délivrance/Issue Date: 2004/07/27
(85) Entrée phase nationale/National Entry: 1994/04/15
(86) N° demande PCT/PCT Application No.: JP 1993/001161
(87) N° publication PCT/PCT Publication No.: 1994/004421
(30) Priorité/Priority: 1992/08/19 (4/63926U) JP

(51) Cl.Int.^{5}/Int.Cl.^{5} B65D 25/28, B65D 5/46, B65D 3/22

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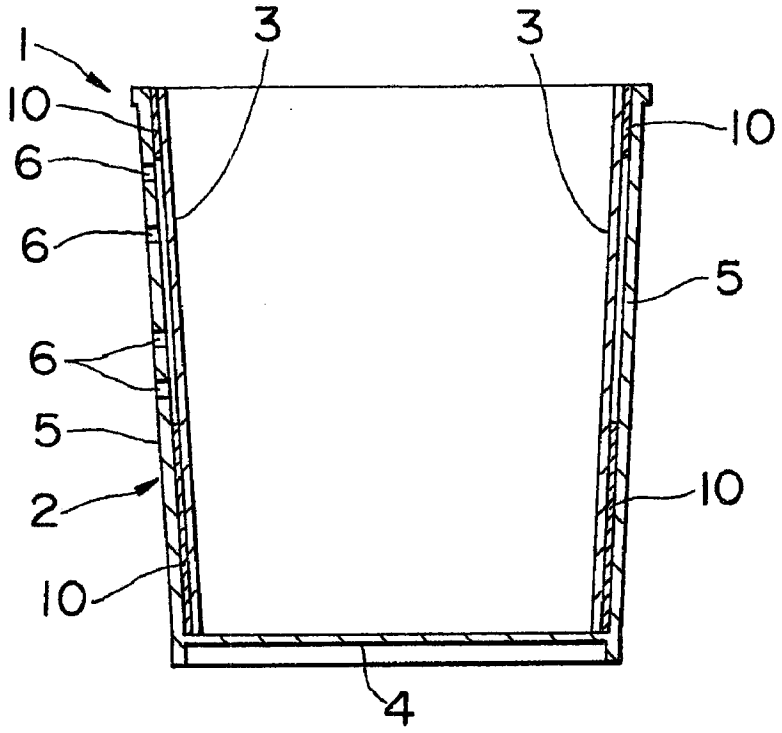
(54) Titre : CONTENANT MUNI D'UNE ENTAILLE ET METHODE DE FABRICATION
(54) Title: CONTAINER HAVING EAR AND A METHOD FOR MANUFACTURING THE SAME



(57) Abrégé/Abstract:
The object of the present invention is to provide a container made of a synthetic resin, which can be piled efficiently since the ears do not prevent piling. According to the present invention, the container comprising: a bottom part (4); a drum part (5) provided upwardly on the periphery of the bottom part; an ear (7) divided and formed by a kerf (6) on the drum part, which is formed unified with the drum part and can stand up from the same; and a synthetic resin film (3) covering the kerf liquid-tightly on at least the ear forming part of the drum part. The invention is designed so that the ear can stand in use while the container can pile without projection of the ear before using.

Abstract

The object of the present invention is to provide a container made of a synthetic resin, which can be piled efficiently since the ears do not prevent piling. According to the present invention, the container comprising: a bottom part (4); a drum part (5) provided upwardly on the periphery of the bottom part; an ear (7) divided and formed by a kerf (6) on the drum part, which is formed unified with the drum part and can stand up from the same; and a synthetic resin film (3) covering the kerf liquid-tightly on at least the ear forming part of the drum part. The invention is designed so that the ear can stand in use while the container can pile without projection of the ear before using.

CONTAINER HAVING EAR AND A METHOD FOR MANUFACTURING THE SAME

Technical Field

The present invention relates to a container with an ear being made of synthetic resin and a method for manufacturing the same.

Background Art

In general, a cup-shaped container made of synthetic resin comprises a bottom part, and a cylindrical drum part provided on the periphery of the bottom part and having an opening at the top surface. As such a container, there are known one having an ear being unified and one having no ear.

The container having an ear is more convenient than the one having no ear since it is easy to bring hot contents, such as coffee. However, in manufacturing, in transportation, or in storing, the container having an ear has the disadvantage in that the ear hinders efficient piling to thereby make the pile bulky.

Particularly, in case of containers whose ear projects outwardly, it is very inconvenient such as when storing, in a pile, them in an automatic vending machine for coffee or the like, and when bringing them for a picnic or the like.

It is therefore an object of the present invention to provide a container having an ear and being made of synthetic resin, in which the ear allows to efficiently pile the container without

hindering the piling, and a method for manufacturing the same container.

Disclosure of the Invention

According to the present invention, there is provided a container comprising; a bottom part, a drum part extending upwardly from a periphery of the bottom part, an ear divided and formed by a kerf, the ear being integrally formed with the drum part and being able to be lifted up therefrom, and a synthetic resin film which is liquid-tightly bonded to cover at least an ear-forming region and the kerf of the drum part.

Explanatory variations according to the present invention are described as follows:

First, the ear can be lifted up easily by providing a thin folding line on the boundary between the ear and the drum parts.

Also, the container can be structured so that the bottom and the drum parts are molded integrally, the ear is formed on the drum part by providing the kerf thereon, and the synthetic resin film is covered over the ear and kerf parts and is adhered to an iside of the drum part liquid-tightly.

Next, the container can be structured so that the bottom and the drum parts are formed integrally, the ear is formed on the drum part by providing the kerf thereon, and the

synthetic resin film of a cylindrical shape, which has openings at its top and bottom and covers all over the inner surface of the drum part, is adhered to

the inner surface of the drum part. In this case, however, the film is not adhered to the ear.

Further, the container can be structured so that the bottom and the drum parts are formed integrally, the ear is formed on the drum part by providing the kerf thereon, and the synthetic resin film of a cylindrical shape, which has a bottom and an opening at its top and covers all over the inner surface of the drum part and the inner surface of the bottom part, is adhered to the inner surface of the drum.

The container can be structured so that the ear is formed by providing the kerf on the cylindrical drum part having openings at its top and bottom, and the bottom of the synthetic resin film having a cylindrical shape, which has the bottom and an opening on its top and covers all over the inner surface of the drum part and the inner surface of the bottom part, is used also as that of the container itself by adhering the cylindrical synthetic resin film to the inner surface of the drum part while

Further, the container can be molded in a good design by printing a pattern on the periphery of the synthetic resin film cylindrically-shaped and adhering the film to the inner surface of the cylindrical drum part which is transparent. In this case, the film can be formed as multi-layered films and a printed layer can be provided as the intermediate layer of the multi-layered films to form a pattern.

Molding process for the container according to the present

invention is described as follows:

First, a die having a cavity for molding the drum part is provided. This die is designed to mold the kerf and the ear simultaneously with the molding of the drum part. The cavity can be also designed to mold the bottom part integrally with the drum part.

A synthetic resin film is set by inserting in such a die in advance. The film is cut in such a size as to cover the ear and the kerf and is then set at a part of the die corresponding to the ear, or the film, after cylindrically shaping either with a bottom or without a bottom so as to cover all over the inner surface of the drum part, is set in the die.

In this case, a release agent is previously coated on the synthetic resin corresponding to the ear-forming part. Alternatively, an ink containing a release agent may be used. In addition, instead of using a release agent, a resin film having no affinity with the drum forming resin may be intervened between the synthetic resin film corresponding to the ear part and the drum part.

A molten resin is injected from a blender of the resin into the die, in which such a synthetic resin film is set, by an injection molding method, whereby the film is molded in the state of adhering to the inner surface of the drum part. In addition, since the release agent or the film having no affinity with the resin constituting the ear part is intervened previously between the synthetic resin film of the ear forming part and the drum part, the

ear does not to adhere to the drum part but can stand up therefrom.

Instead of the manufacturing process described above, the synthetic film may be simply welded to the kerf perimeter of the inner surface of the drum part by a heat-seal process.

Brief Description of the Drawings

Fig. 1 is an exploded cross view showing a first embodiment of the present invention;

Fig. 2 is a longitudinal sectional view of the first embodiment;

Fig. 3 is a sectional view of A-A illustrated in Fig. 1;

Fig. 4 is a sectional view of a container molding die of the present invention;

Fig. 5 is a process drawing showing a molding method for a container according to the present invention;

Fig. 6 is a process drawing showing a molding method for the container according to the present invention;

Fig. 7 is a process drawing showing a molding method for the container according to the present invention;

Fig. 8 is a process drawing showing a molding method for the container according to the present invention;

Fig. 9 is a longitudinal sectional view showing a second embodiment of the present invention; Fig. 10 is a longitudinal sectional view showing a third embodiment of the present invention;

Fig. 11 is a process drawing showing a molding method for the second and the third embodiments according to the present invention;

Fig. 12 is a sectional view showing a thermo-form method for molding a synthetic resin film into a cylindrical and bottomed shape, that is used in the second and the third embodiments of the present invention;

Fig. 13 is an exploded cross view showing a fourth embodiment of the present invention;

Fig. 14 is a perspective view showing a fifth embodiment of the present invention;

Fig. 15 is a perspective view showing a cylindrical synthetic resin film that is used in the fifth embodiment;

Fig. 16 is an exploded cross view showing a sixth embodiment of the present invention;

Fig. 17 is views showing various examples of thin folding lines of the ears according to the present invention; and

Fig. 18 is an exploded cross view showing one of various examples according to the sixth embodiment of the present invention.

Best Mode for Carrying out the Invention

[First Embodiment]

The present invention will now be described in detail with reference to the preferred embodiments thereof, taken in connection with the accompanying drawings.

In this embodiment, a container 1 includes a container main body 2 and a synthetic resin film 3 covering the entire inner surface of the container main body 2, as shown in Fig. 1.

The container main body 2 includes a circular bottom part 4 and a cylindrical drum part 5 extending or standing up from a peripheral edge of the bottom part 4 to form an opening at a top of the drum part 5.

Further, ears 7 and 7' are divided (i.e., cut out) and formed by grooving kerfs 6 and 6' in a rear surface of the drum part 5. The first ear 7 is formed by the two kerfs 6 and 6 that are being parallel to each other and have a C-shape while one is larger than the other. The second ear 7' is formed of the two kerfs 6' and 6' that have a reversed C-shape while one is larger than the other. The kerfs 6' and 6' forming the second ear 7' are horizontally symmetric to the kerfs 6 and 6 forming the first ear 7 so that a pair of ears 7 and 7' are divided and formed such that the former ear forms a C-shaped band and the latter ear forms a band which is horizontally symmetrical to the former band. A pair of semicircle-shaped notches 9 and 9' are formed at a longitudinal center part of an outside of the kerfs 6 and 6', respectively. The notches 9 and 9' are provided so that fingers may be inserted to thereby raise up the pair of ears 7 and 7' more easily.

There are provided thin folding lines 11 and 11' in the base parts of the ears 7 and 7'. These thin folding lines

11 and 11' are provided at a position that links ends of the C-shaped kerfs 6 and 6 or the kerfs 6' and 6'.

The synthetic resin film 3 is adhered to the inner surface

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of the drum part 5 of the container main body while it covers over an ear forming part 8 including the ears 7 and 7', the kerfs 6 and 6' and the notches 9 and 9' liquid-tightly. Consequently, it is impossible for liquid contents to leak out of the container main body through the kerf 6 or 6'. Moreover, the inner surface of the film is not adhered to either the inner surface of the ear 7 or that of the ear 7' in the region of the ear forming part 8, so that the ears 7 and 7' can be lifted up.

In Fig. 1, an adhesive layer 10 is coated onto an outer circumference of a top end part and an outer circumference of a lower part of the cylindrical synthetic resin film 3, while a non-adhesive part 12 is provided between the two adhesive layers 10 and 10. When the cylindrical synthetic resin film 3 is loaded onto the inside of the drum part 5, the synthetic resin film 3 adheres to the inner surface of the drum part 5 by the adhesive layers 10 and 10. Nevertheless, the non-adhesive region 12 corresponds to the ear forming part 8 so that each of the ears 7 and 7' does not adhere to the synthetic resin film 3.

Next, an example of manufacturing methods for the container according to this first embodiment will be explained below with reference to Figs. 4 to 8.

The method explained hereinafter uses a so-called insertion molding process.

First, a die illustrated in Fig. 4 is provided. The die includes a female mold 21 of which inner surface models an outline

shape of the container and a male mold 23 which is inserted into the female mold 21. These male mold 23 and female mold 21 are fitted to close so that a container molding cavity 25 is formed therebetween as shown in Fig. 6. Moreover, a gate 27 for supplying a molten resin into the cavity 25 is provided in the female mold 21. Projections 6a are also provided on the inner wall face of the female mold 21 in order to form the kerfs 6 and 6'.

Meanwhile, a cylindrical synthetic resin film as shown in Fig. 1 is provided. This cylindrical synthetic resin film can be molded cylindrically such as by the steps of rolling a flat film cylindrically, superimposing both ends thereof, and then adhering these ends by means of heat-sealing or the like and by the step of extruding a molten resin from an extrusion die having a circular extruding port.

The periphery of the cylindrical synthetic resin film is coated with an adhesive layer in advance as shown in Fig. 1.

Next, the male mold 23 and the female mold 21 are first opened and then the cylindrical synthetic resin film provided previously is loaded into the female mold 21 or loaded onto the periphery of the male mold 23 as shown in Fig. 5.

Thereafter, the male mold 23 and the female mold 21 are closed as shown in Fig. 6 and the molten resin is extruded into the cavity 25 through a nozzle 31 of an injection molding machine as shown in Fig. 7.

After the resulting molded product is cooled, the die is

opened to take out the molded product or a molded container as shown in Fig. 8.

In this embodiment, the material of the container main body 2 is polypropylene, that of the synthetic resin film 3 is polyethylene terephthalate which is different from the material of the container main body 2 and has no affinity with polypropylene, and that of the adhesive layer 10 is polypropylene, respectively.

When the container main body 2 is injection-molded, the adhesive resin layer 10 will melt so as to unify the synthetic resin film 3 with the same container main body.

According to this embodiment, the synthetic resin film has an advantage that the position of the same can be registered easily when being fixed.

Further, in this embodiment, when the synthetic resin film 3 consists of an adhesive synthetic resin having an affinity with the resin of the drum part 5, such a container having the same function as described in this embodiment can be constituted by coating a release agent onto the region 12 corresponding to the ear forming part 8, while the above-described adhesive layer 10 is not required.

[Second Embodiment]

Next, a second embodiment according to the present invention will be explained with reference to Figs. 9, 11 and 12.

In this embodiment, the synthetic resin film loaded into the container main body 2 is molded so as to be cylindrical and have a

bottom. That is, the synthetic resin film 3 includes a circular bottom part film 3a and a drum part film 3b standing up from the periphery of the bottom part film 3a. The bottom part film 3a is loaded onto the inner surface of the bottom part of the container main body 2 while the drum part film 3b is loaded onto the inner surface of the drum part of the same container main body 2.

Such a synthetic resin film 3 cylindrical and bottomed in shape is molded by means of a so-called thermo-form method. That is, as shown in Fig. 12, a thermo-form molding die having a female mold 41 for use in forming a concave part having such a figure as a cylindrical bottomed container and a male mold 43 for use in forming a convex part of the same. Then, a flat pre-heated synthetic resin film is laied onto the top surface of the female mold 41 and the male mold is fitted to the female mold while the film is pressed thereon by the male mold. In this case, the inside of the female mold is negatively pressurized by an air-suction through a suction path being provided with the female mold 41, which pressure allows the film to adhere onto the inner surface of the die, or a compression air is supplied to the top surface of the film through a compression air path not shown being provided with the male mold 43. Thus, the film forming body which is cylindrical and bottomed in shape is made up to be loaded into the container molding die as shown in Fig. 11 so that a container illustrated in Fig. 9 is molded by the same process as explained in Figs. 5 to 8 in the first embodiment.

As long as such a synthetic resin film being cylindrical and bottomed in shape is used, leaking of liquid can be avoided regardless of the liquid-tight function in the part of the kerfs 6.

[Third Embodiment]

Further, third embodiment of the present invention will be explained with reference to Figs. 10, 11 and 12.

The container of this embodiment has the same structure as in Fig. 9 except that a bottom part 4 of the container main body is deleted. In order to obtain a function to contain a content, the bottom part film 3a of a synthetic resin film is also used as a bottom part of a container.

Because the other aspects are the same as that of the second embodiment, further explanations will be omitted.

[Fourth Embodiment]

A fourth embodiment of the present invention will be described with reference to Fig. 13.

In this embodiment, there is used a synthetic resin film whose size is minimum , that is, a film 3c having a size to cover partially the ear forming part 8 as shown in Fig. 13.

In this case, the surrounding part of the film 3c is adhered to the outside of the kerfs 6 and 6' of the inner surface of the drum part 5 of the container main body 2.

In this embodiment, methods for adhering the film can be

also carried out not only by melt-adhering the adhesive layer in accordance with the insertion molding process, but also by heat-sealing or ultrasonic-welding the surrounding part of the film to the drum part 5 or by using an adhesive.

In this embodiment, the manufacturing cost can be reduced because only a flat film is used without molding the film into cylindrical shape or cylindrical and bottomed shape as explained in the above embodiments.

[Fifth Embodiment]

A fifth embodiment will be described with reference to Figs. 14 and 15.

In this embodiment, a cylindrical synthetic resin film 3 is loaded into a container main body 2.

The container main body 2 is made of a transparent synthetic resin, for example, polypropylene.

The synthetic resin film 3 loaded into the container main body is formed by laminating an inner layer film, an intermediate layer film and an outer layer film, which are all transparent, and on the intermediate layer a desired pattern 51 is previously formed by printing.

The outer layer film of the synthetic resin film 3 is made of a resin having an affinity with that of the container main body 2, namely the resin of the outer layer has the same property as that of the container body, i.e., polypropylene. Other olefinic resins may also be used.

Also, an ink 52 containing a release agent is printed in a region which corresponds to the ear forming part 8 on an outer surface near the top part of the outer layer film as shown in Fig.15.

Because other aspects are the same as those of the first embodiment except that the adhesive layer 10 is not formed by coating, a further explanation is omitted.

A method for molding the container according to this embodiment is the insertion molding method explained above in relation to the first embodiment. In this case, since the outer layer film is made of polypropylene, it will adhere to an injected molten resin so as to integrally bond with the drum part 5.

At this time, since the ears 7 and 7' are formed at a position that corresponds to the region wherein the ink 52 containing a release agent is printed on the surface of the outer layer of the film 3, the ears 7 and 7' do not adhere to the film.

When the container with an ear is in use, a pair of the C-shaped ears 7 and 7' are raised up by fingertips through a concave 9 at each of a cardinal point of the thin folding lines 11 and 11' to project them outwardly from the drum part 5 so that the ears may be unified into one ear body.

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In this case, since each of the ears 7 and 7' corresponds to the surface printed with the ink 52 containing a release agent, they do not adhere to the film 3 so that they can be raised up and projected outwardly with ease.

Also, since the pattern 51 is printed beforehand on the synthetic resin film 3, the container main body 2 can be easily patterned by using an injection resin made of the transparent material for molding.

Further, the synthetic resin film 3 is not required to be formed of three layers as explained in this embodiment, but it can be formed by the steps of printing a pattern on a part of an outer surface of one layer film, coating an ink 52 containing a release agent on a region corresponding to the ear forming part 8, and then coating an adhesive layer as explained in the first embodiment on the other part of the outer surface.

The synthetic resin film 3 may be formed of two layers consisting of an inner and an outer layers in which a pattern is printed on the outer surface of the inner layer or on the inner surface of the outer layer so as to be positioned between these two layers.

In addition, the synthetic resin film having a cylindrical and bottomed shape as described in the second and the third embodiments can be used in this fifth embodiment.

In this embodiment, when the outer film is formed of a resin having no affinity with that of the container main body 2, it is

possible not to coat an ink 52 containing a release agent over the face corresponding to the ear forming part 8 but to coat and form the adhesive layer 10 according to the first embodiment on the other part.

In this embodiment, further, an intervention film 61 made of non-adhesive resin having no affinity with the resin of the drum part may be used as shown in the Figs. 16 and 18 instead of using an ink containing a release agent.

[Sixth Embodiment]

A sixth embodiment will be explained with reference to Fig. 16.

The embodiment shown in Fig. 16 has the following constitution in addition to the first embodiment,:

An adhesive layer is coated and formed all over the outer surface of the cylindrical synthetic resin film 3. The intervention film 61 made of non-adhesive resin having no affinity with the resin of the container main body 2 is adhered to the region corresponding to the ear forming part 8 on the outer surface of the synthetic resin film 3.

A container having the intervention film 61 between the ears 7 and 7' and the synthetic resin film 3 is molded by insert-molding such a synthetic resin film 3 having the intervention film in accordance with the same molding method as the first embodiment.

In this case, since the ears 7 and 7' correspond to the

intervention film 61 made of the resin having no affinity with the resin forming the container main body, the ears can be detached from the intervention film 61 so as to be raised up and projected outwardly with ease.

This embodiment is also applicable to the second and the third embodiments.

Moreover, according to this embodiment, the adhesive layer 10 can be omitted at the region except the intervention film adhering part as shown in Fig. 18 by making up the synthetic resin film 3 of the adhesive synthetic resin having an affinity with the resin forming the drum part.

[Other Embodiments]

Various modification examples according to the present invention can be realized as follows.

It is possible to design so that the ears 7 and 7' turn over and do no return to their original position when the ears are lifted up and cross a fixed dead point. Examples of such measure include (i) inclining the thin folding lines 11 and 11' to a center axis of the container drum part as shown in Fig. 17(A); (ii) forming the thin folding lines in a circular arc shape as shown in Fig. 17(B); and (iii) forming the thin folding lines by two sides of a triangle which form an interior obtuse angle as shown in Fig. 17(C). Consequently, the ears do not return to the drum part side if the hand let them off so

that it is easy to re-hold them again.

In the above embodiments, a pair of ears 7 are provided

horizontal-symmetrically, however, they can be provided vertical-symmetrically, further, it is also possible to provide only one ear. The pair of ears 7 can be not only divided and formed at the double C-shaped kerfs 6 as mentioned above but also divided and formed at the inside of one of the C-shaped kerfs.

Further, it is possible to use any thermoplastic resins as the synthetic resin material to make up the container main body or the synthetic resin film according to the present invention. It is also possible to use a foaming resin to make up the container main body.

Industrial Applicability

As described above, the container according to the above embodiments can be piled efficiently and is not bulky in manufacturing, in transportation, or in storing since the ears are formed as a part of the drum part of the container main body without projecting outwardly when not in use. In addition, since the ears and the container main body are molded into a unity, the manufacturing cost is advantageous.

The container having the ears according to the present invention can be used in a simple manner such as raising up the ears outwardly so that it is very handy, easy and convenient to use.

The containers of this kind can also be used as a container for instant noodles, for an instant coffee or for any kind of drinks, further, the containers can be piled and stored in an

automatic vending machine. It is also very useful for a disposable container for a picnic.

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A container comprising;

a bottom part having a periphery:

a drum part extending upwardly from the periphery of the bottom part and having an ear-forming region;

at least one ear in the ear-forming region of the drum part, wherein the ear is divided from the drum part and formed by a kerf on the drum part, is integrally formed with the drum part and is capable of being lifted up from the drum part; and

a synthetic resin film which is bonded to the drum part and liquid-tightly covers at least a region of an inner surface of the drum part corresponding to the ear-forming region as well as the kerf.

2. The container according to claim 1, wherein a thin folding line is formed at a boundary between the ear and the drum part.

3. The container according to claim 2, wherein the thin folding line is inclined relative to a center axis of the drum part.

4. The container according to claim 2, wherein the thin folding line has a circular arc shape.

5. The container according to claim 2, wherein the thin folding line is formed of two sides of a triangle which form an interior obtuse angle.

6. The container according to any one of claims 1 to 5, wherein the bottom part and the drum part are molded integrally in one piece to constitute a container main body.

7. The container according to claim 6, wherein the synthetic resin film is a cylindrical film covering entirely, the inner surface of the drum part and having a bottom part and an opening at a top.

8. The container with the ear according to claim 6, wherein the synthetic resin film includes a bottom part film covering an inner surface of the bottom part and a drum part film extending up from a periphery of the bottom part film to cover entirely the inner surface of the drum part, and is formed cylindrically with a bottom and an opening at a top.

9. The container according to any of claims 1 to 5, wherein:

the drum part is formed cylindrically with an opening at a top and the bottom part to constitute a container main body;

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the synthetic resin film comprises, a bottom part film that constitutes as the bottom part of the container and a drum part film extending from a periphery of the bottom part film; and

the synthetic resin film covers the entire inner surface of the drum part and is formed cylindrically with and opening at a top.

10. The container according to any one of claims 1 to 5, wherein:

the synthetic resin film is cylindrical;

a pattern is printed on a periphery of the film; and

the drum part is made of a transparent synthetic resin.

11. The container according to claim 10, wherein the synthetic resin film is a multi-layered film and has the pattern between an outer layer and an inner layer.

12. The container with the ear according to claim 11, wherein the synthetic resin film is a three or more layered film and the pattern is printed on an intermediate layer film between an outer layer and an inner layer.

13. The container according to claim 11 or 12, wherein the outer layer of the synthetic resin film is made of a synthetic resin having no binding affinity with a resin forming the drum part and has an adhesive layer thereon, except for a part corresponding to the ear forming region so that the adhesive layer liquid-tightly adheres the outer layer to the kerf.

14. The container according to claim 11 or 12, wherein:

the outer layer of the synthetic resin film is made of a synthetic resin having a binding affinity with a resin forming the drum part; and

a release agent is coated on the outer layer in a region corresponding to the ear-forming region.

15. The container according to claim 11 or 12, wherein:

the outer layer of the synthetic resin film is made of a synthetic resin having a binding affinity with a resin forming the drum part; and

an intervention film made of a resin having no binding affinity with the resin forming the drum part is adhered to the outer layer in a region corresponding to the ear-forming region.

16. The container according to claim 11 or 12, wherein:

an adhesive layer capable of adhering to the drum part is formed on an outer surface of the outer layer of the synthetic resin film; and

an intervention film made of a resin having no binding affinity with a resin constituting the drum part is adhered to the outer layer in a region corresponding to the ear-forming region.

17. The container according to any one of claims 1 to 5, wherein the synthetic resin film is made of a resin having no binding affinity with a resin forming the drum part and has an adhesive layer thereon except for a part corresponding to the ear forming region so that the adhesive layer liquid-tightly adheres the synthetic resin film to the kerf.

18. The container according to claim 1, wherein:

the synthetic resin film is made of a synthetic resin having a binding affinity with a resin forming the drum part; and

a release agent is coated on the synthetic resin film in a region corresponding to the ear-forming region.

19. The container according to any one of claims 1 to 5, wherein:

the synthetic resin film is made of a synthetic resin having a binding affinity with a resin forming the drum part; and

an intervention film made of a resin having no affinity with the resin forming the drum part is adhered to the synthetic resin film in a region corresponding to the ear-forming region.

20. The container according to any one of claims 1 to 5, wherein:

an adhesive layer capable of adhering to the drum part is formed on an outer surface of the synthetic resin film; and

an intervention film made of a resin having no binding affinity

with a resin forming the drum part is adhered to the outer surface of the synthetic resin film in a region corresponding to the ear-forming region.

21. A method for manufacturing the container as defined in claim 1, which method comprises the steps of:

providing a die including a cavity which has a bottom part and a drum part, the cavity having the same shape as that of the container;

arranging in the die a synthetic resin film having a size corresponding to at least the ear-forming region;

closing the die and injecting a molten resin into the cavity so as to mold at least the drum part;

molding the ear by molding the kerf when the drum part is molded; and

adhering the synthetic resin film to the drum part when the drum part is molded.

22. The method according to claim 21, wherein the bottom part is molded at the same time when the die is closed and the molten resin is injected so that the drum part is molded.

23. The method according to claim 21, wherein a release agent is previously coated on a region corresponding to the ear forming part of the synthetic resin film arranged in the die.

24. The method according to claim 21, wherein an intervention film made of a resin having no binding affinity with the resin constituting the drum part is arranged in a region corresponding to the ear forming region of the synthetic resin film arranged in the die.

25. The method according to claim 21, wherein an adhesive layer is coated and formed in advance all over the synthetic resin film except a region corresponding to the ear forming region.

26. The method according to any one of claims 21 to 25, wherein the synthetic resin film is formed cylindrically in advance before the same film is arranged in the die.

27. The method according to any one of claims 21 to 25, wherein the synthetic resin film is formed cylindrically and is bottomed in advance before the same film is arranged in the die.

28. A method for manufacturing the container as defined in claim 1, which method comprises the steps of:

providing a die including a cavity which has a bottom part and a drum part;

closing the die and injecting a molten resin into the cavity so as to mold at least the drum part;

molding the ear by molding the kerf when the drum part is molded; and

then adhering the synthetic resin film to an inner surface of the drum part, over at least a region corresponding to the ear-forming region except for an inner surface of the ear.

29. A cup-shaped container having a bottom part, a drum part extending upwardly from a periphery of the bottom part and an opening at a top, which container comprises;

(A) a synthetic resin container main body which comprises;

(i) a cylindrical drum part forming the drum part of the container and having an ear-forming region; and

(ii) a pair of ears in the ear-forming region of the cylindrical drum part, wherein the ears are formed integrally with the cylindrical drum part by grooving kerfs in the drum cylindrical drum part and are capable of being lifted up from the cylindrical drum part by a finger; and

(B) a synthetic resin film which is bonded to an inner surface of the cylindrical drum part and liquid-tightly covers at least a region thereof corresponding to the ear-forming region;

wherein the container main body further comprises a bottom part that forms the bottom part of the container when the synthetic resin film does not have a bottom part; and

the container main body optionally further comprises a bottom part that forms the bottom part of the container when the synthetic resin film has a bottom part.

30. The cup-shaped container according to claim 29; wherein the synthetic resin film is bonded by an adhesive to the inner surface of the cylindrical drum part excluding inner surfaces of the ears when the synthetic resin film does not have a bottom part.

31. The cup-shaped container according to claim 29 or 30, wherein the pair of ears consist of a C-shaped first ear formed by two parallel kerfs and a reversed C-shaped second ear formed by two parallel kerfs, the pair of the first and second ears being horizontally symmetrical.

32. The cup-shaped container according to claim 31, wherein each ear, includes a semi circle-shaped notch at a longitudinal center of an outer kerf of the parallel kerfs.

33. The cup-shaped container according to claim 29, 30, 31 or 32, wherein the synthetic resin film has a cylinder shape with no bottom part and covers the entire inner surface of the cylindrical drum part of the container main body.

34. The cup-shaped container according to claim 29, 30, 31 or 32, wherein the synthetic resin film has a cylindrical drum part and a bottom part.

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FIG.1

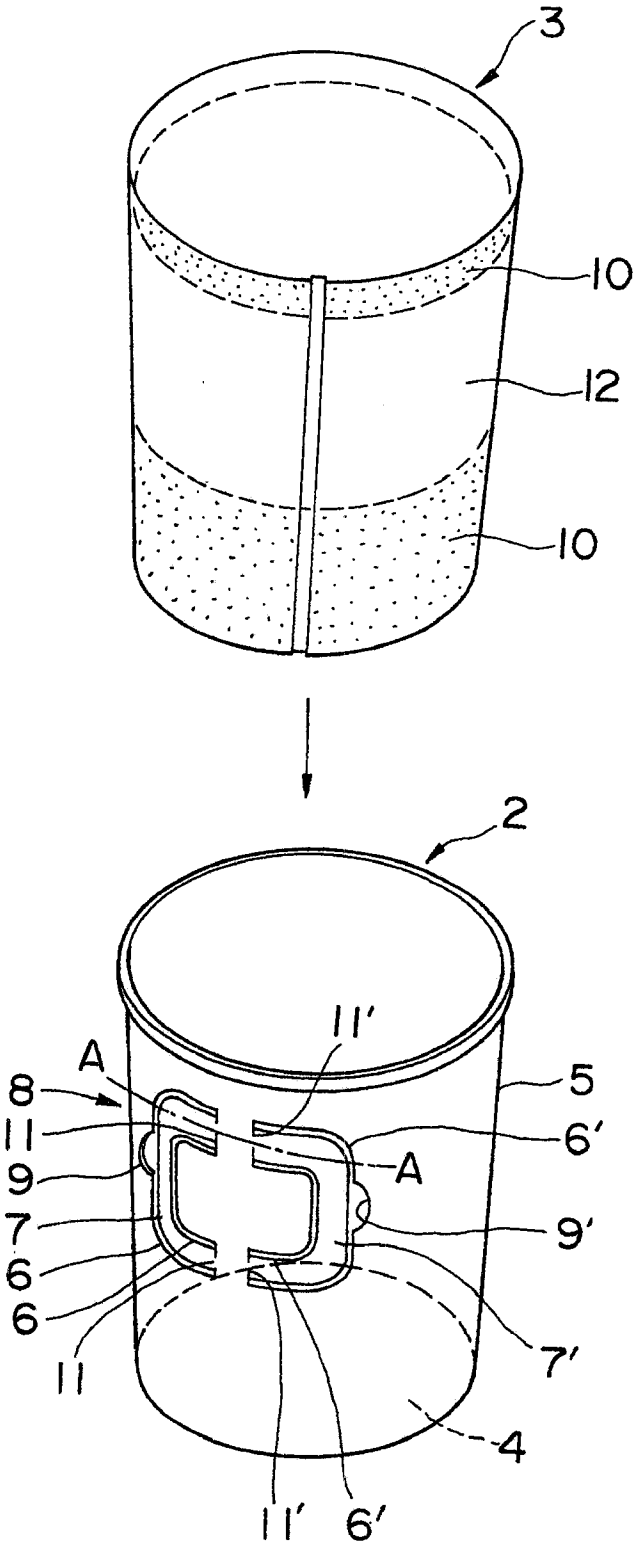

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FIG.2

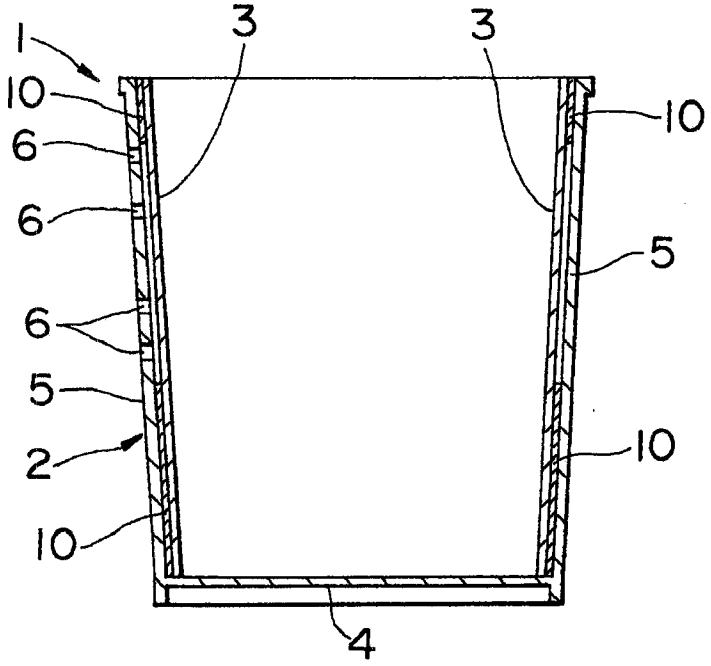

FIG.3

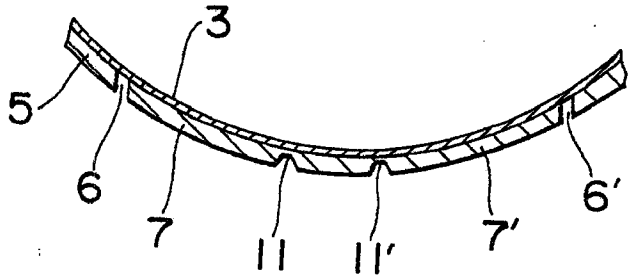

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FIG. 4

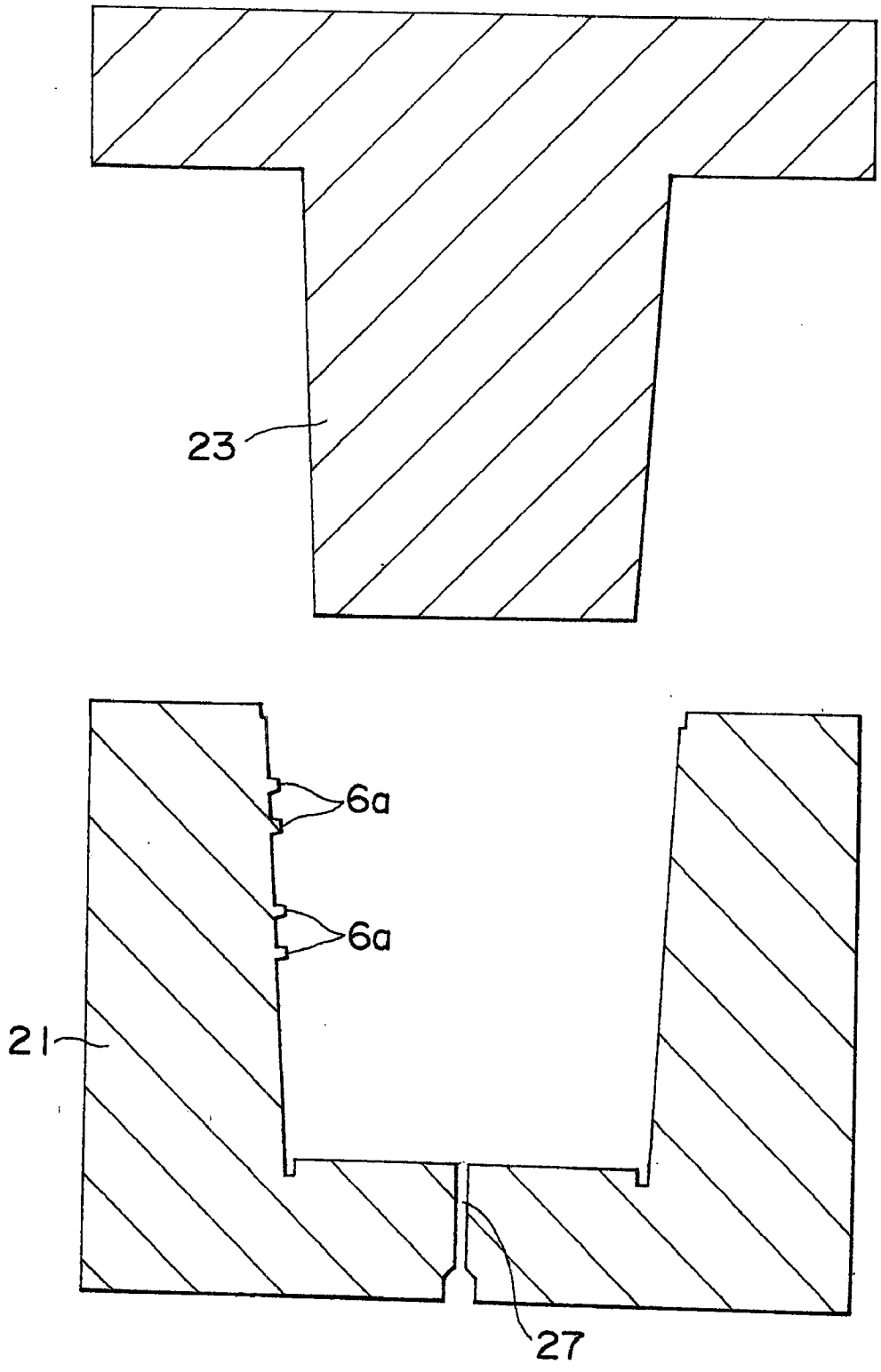

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FIG.5

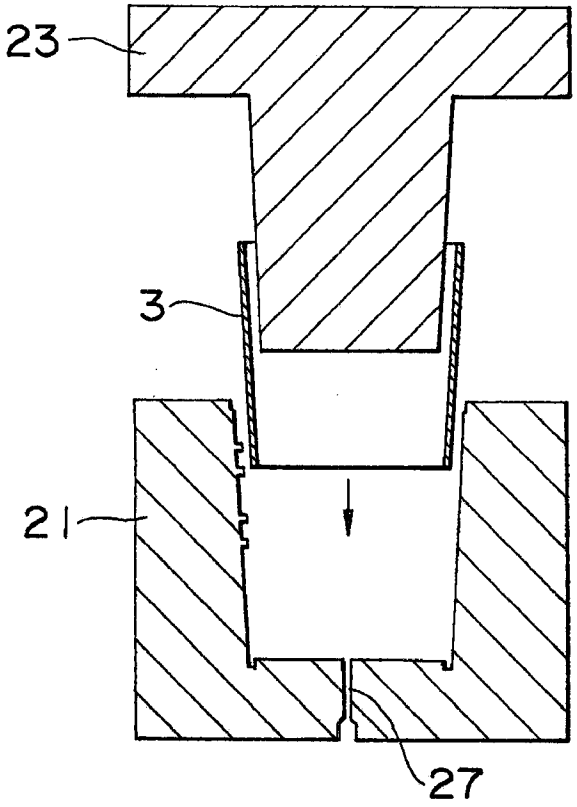

FIG.6

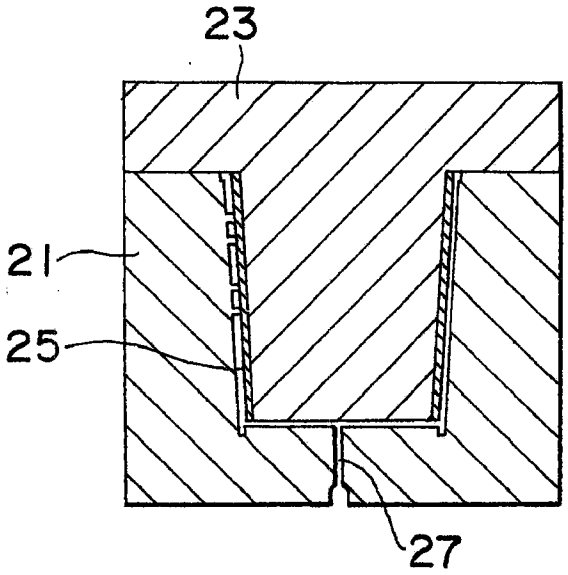

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FIG.7

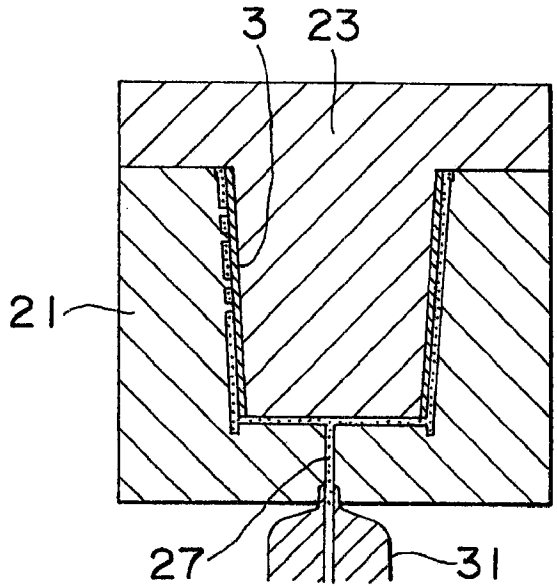

FIG.8

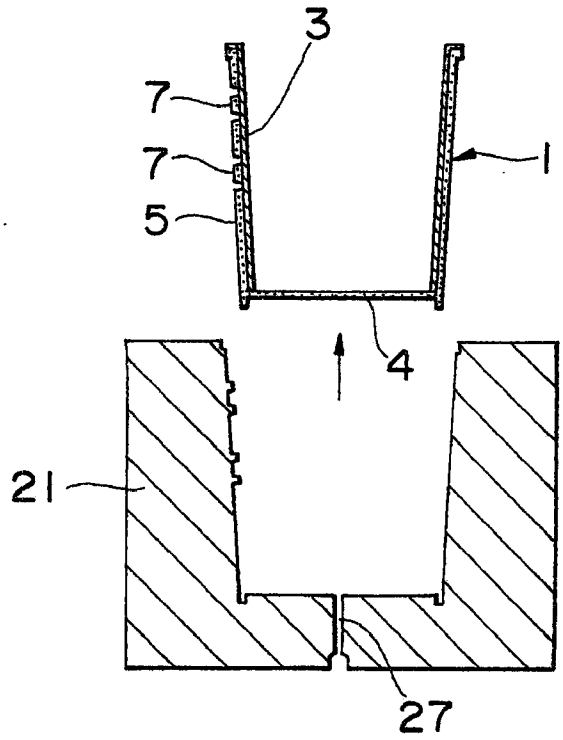

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FIG.9

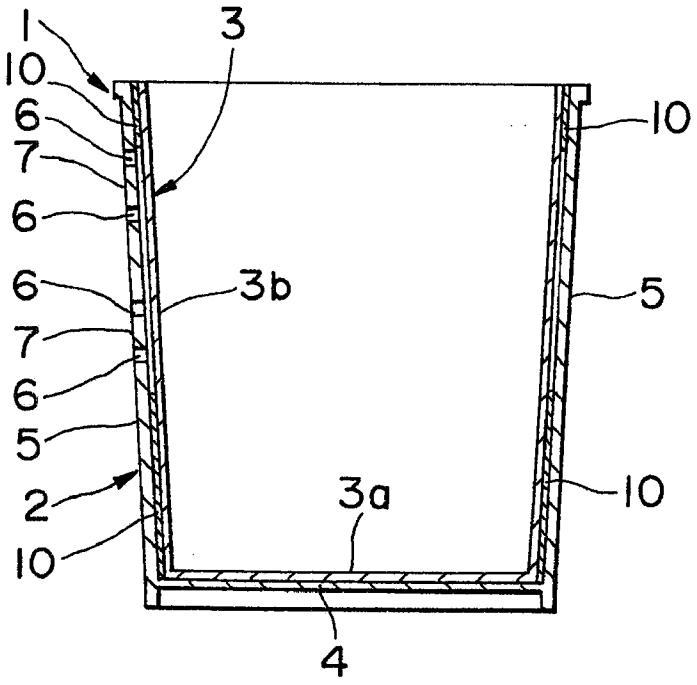

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FIG.10

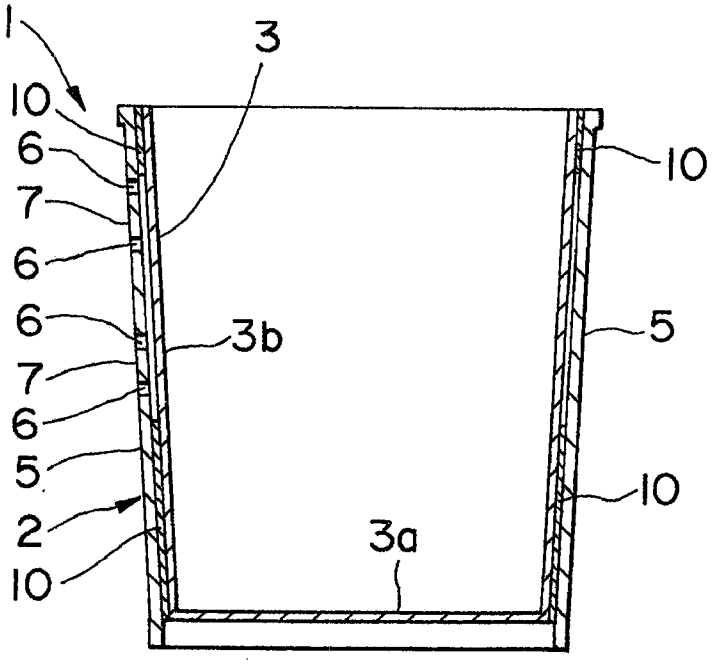

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FIG.11

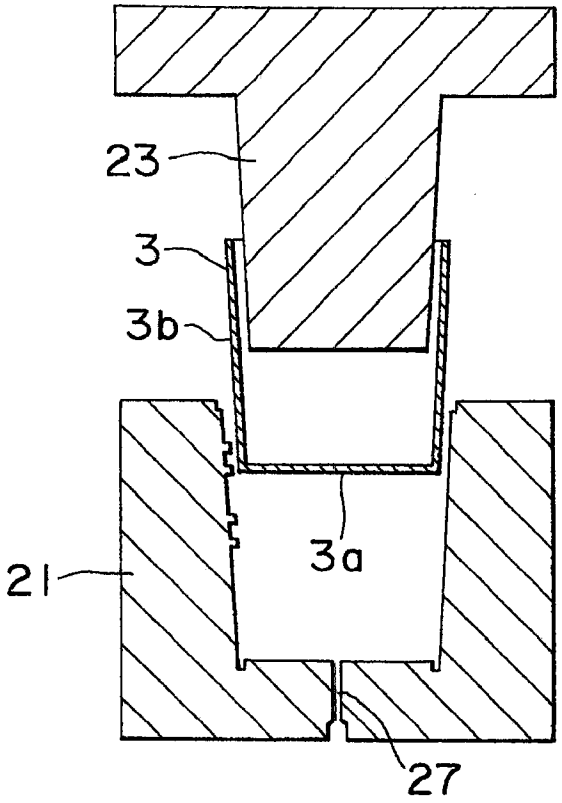

FIG.12

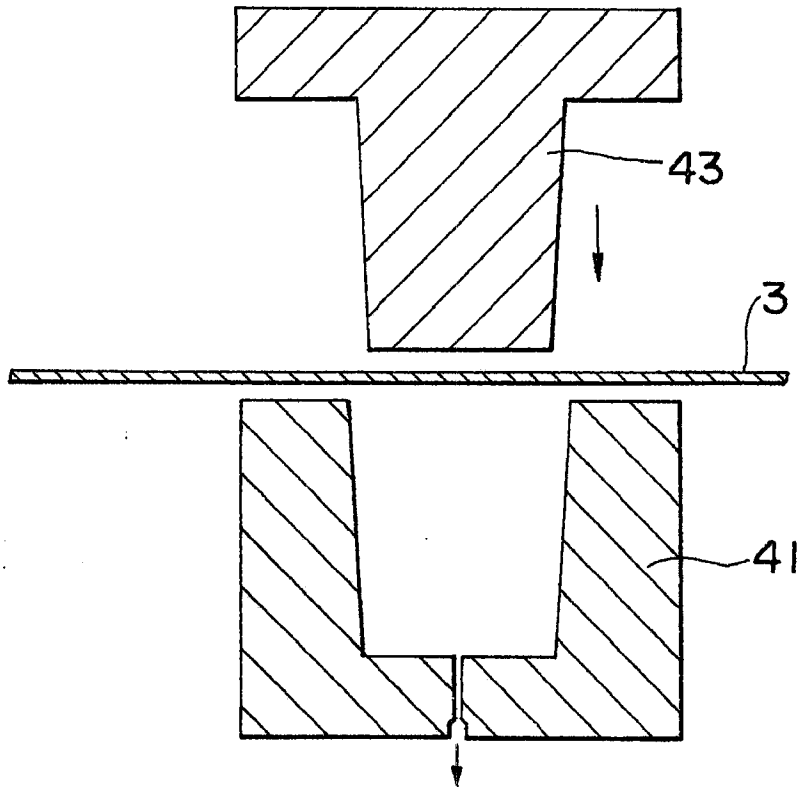

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FIG.13

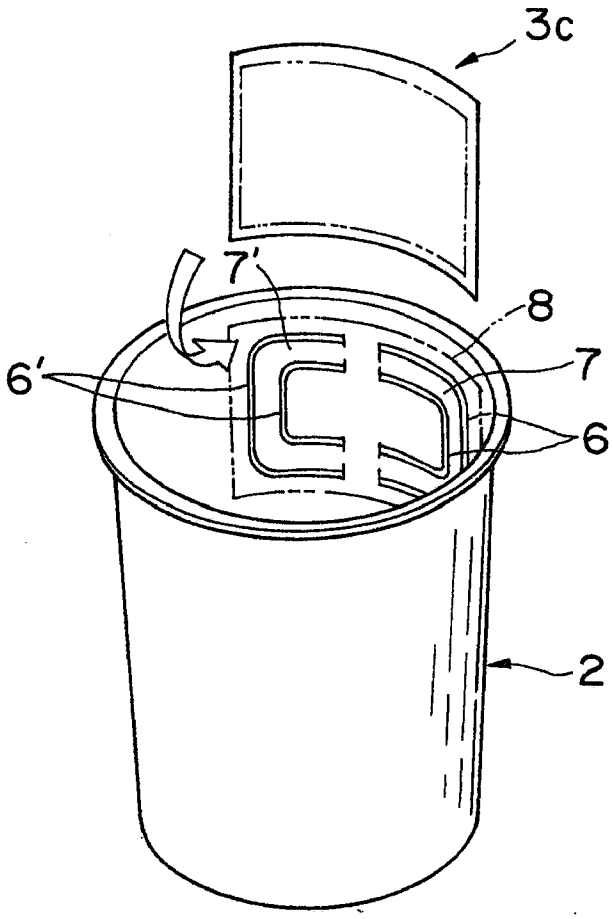

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FIG.14

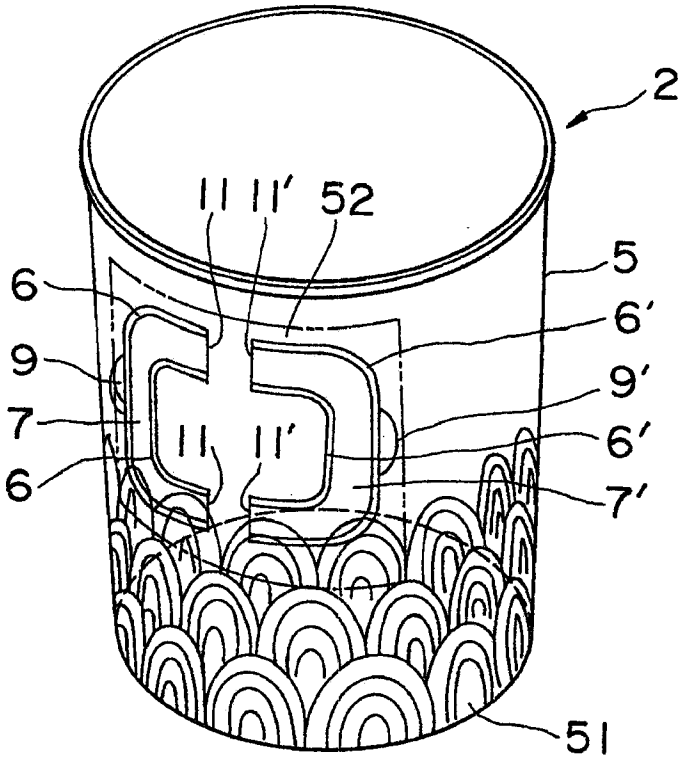

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FIG.15

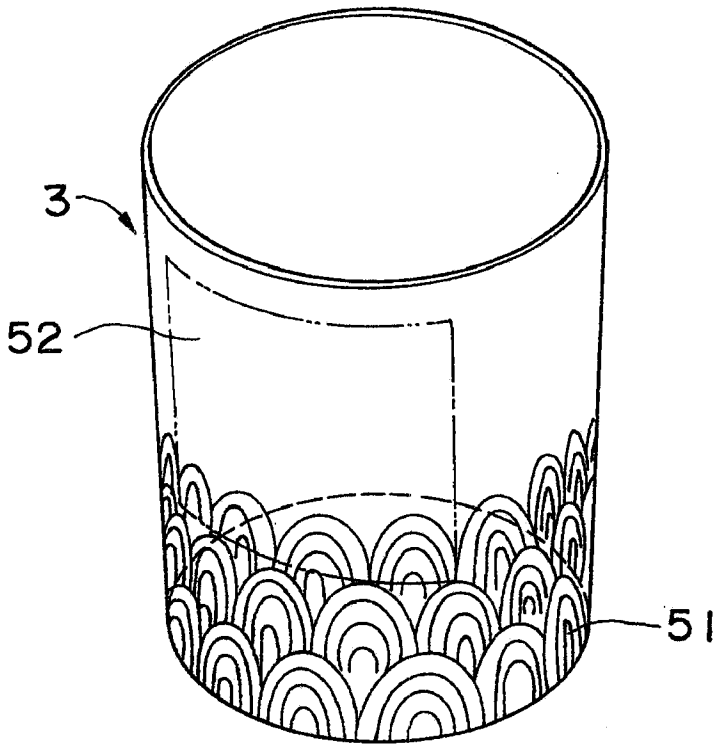

FIG.16

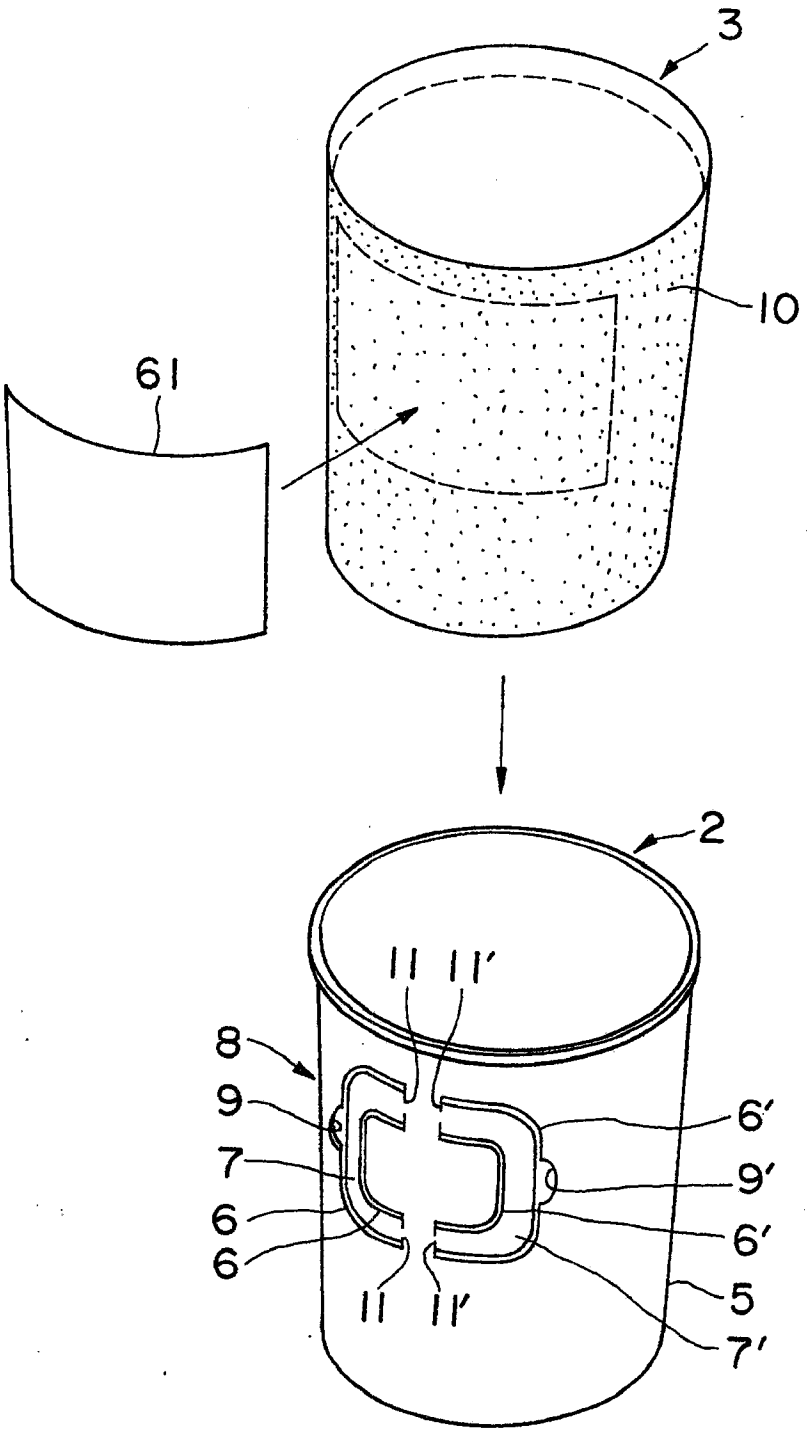

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FIG.17(A)

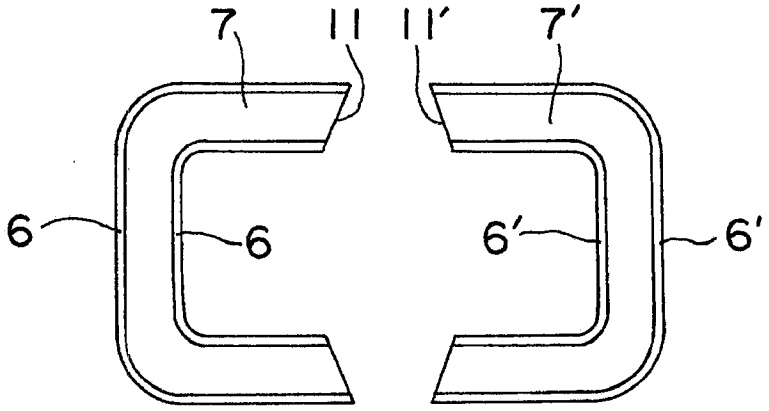

FIG.17(B)

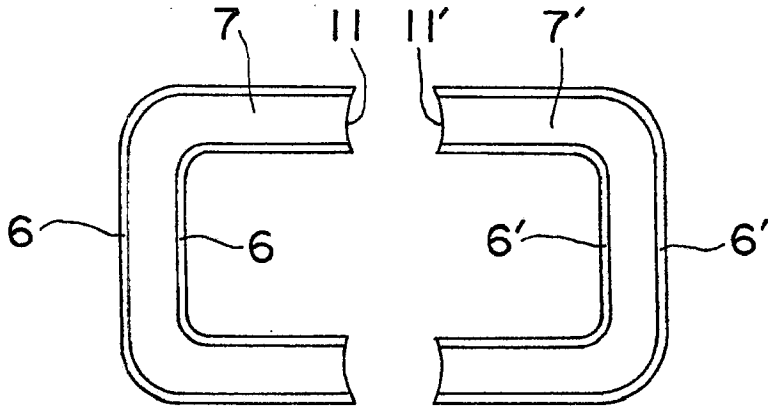

FIG.17(C)

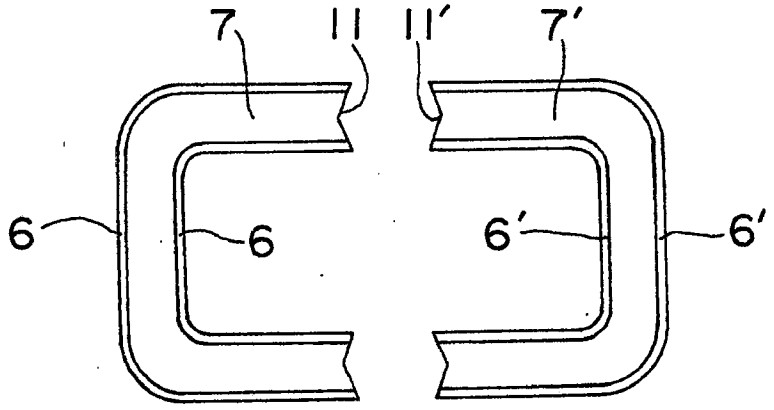

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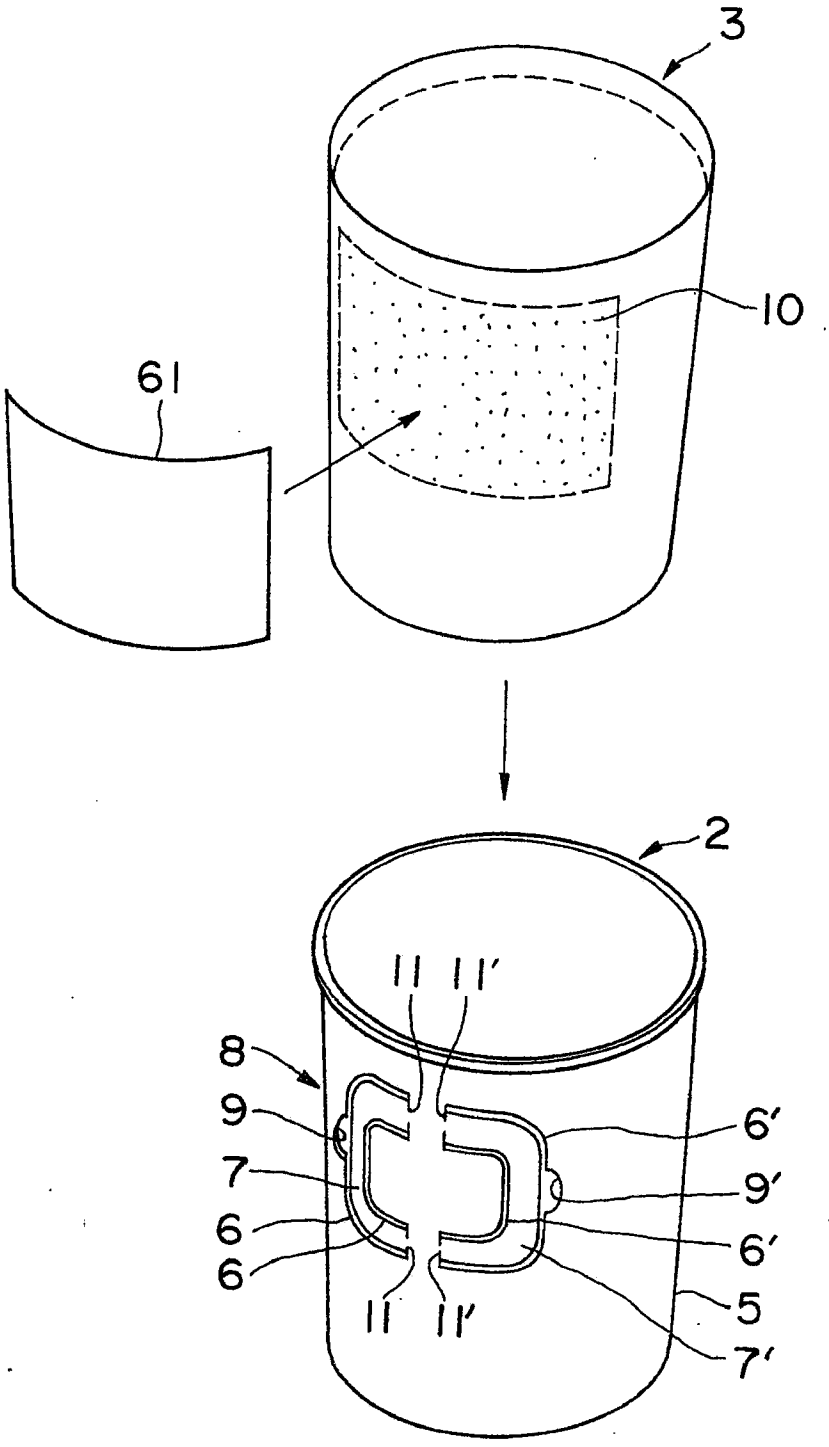
FIG.18



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